

Georeferencer and Old Maps Online: How to turn scanned maps into attractive discoverable resource

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Abstract. Hundreds of thousands of historical maps have now been scanned and made available on-line by libraries around the world, and this has been a great boon to anyone interested in the history of cartography. Despite this fact it is hard to find scanned maps covering area of interest in the large number of online catalogs, library systems and web presentations on the web. The traditional fulltext search engines, such as Google, is failing to index the scanned maps properly.

Old Maps Online is a search system tailored just for historical maps. Pick a location on a world map, or type in a place-name, narrow the search by selecting a date range. A listing of all possible maps covering that location appears, ordered by best geographical match. Select a map, click on the link and you go directly to view the map on the original library's website. You don't need to know who holds the map, just where in the world you want to look at. This system is designed to complement rather than compete with libraries' own search interfaces. The system is powered by the enhanced version of the MapRank Search technology and indexes over 130.000 scanned high-resolution maps already.

Many major collections in the US, UK and elsewhere have agreed to contribute: The British Library, Harvard Library, National Library of Scotland, David Rumsey Map Collection, Dutch National Archives, Moravian Library, New York Public Library, Norman B. Leventhal Map Center at the Boston Public Library, National Library of Australia, etc.

Our aim is to include as many collections as possible, so map libraries and collectors are encouraged to participate. To be able to index the scanned

maps geographically, we must be supplied with minimal metadata (title, creator/publisher, date, identifier,

and a stable url), plus geographic coordinates for the area covered, for each map. We can suggest/provide tools you can use to create the coordinates.

One of the tools is the Georeferencer online service, which allows rapid collaborative georeferencing, 3D visualization, annotation and accuracy analysis of scanned online maps directly in a web browser environment, without the need to install any software on a local computer. The online visitors can help with the metadata enrichment and georeferencing of the scanned maps - and they are motivated with competitions, rewarding, community participation and recognition during this crowdsourcing effort.

The Georeferencer service is applied in several institutions such as the British Library (London), the Moravian Library (Brno), the Nationaal Archief (The Hague), the National Library of Scotland (Edinburgh), and the Institut Cartografic de Catalunya (Barcelona).

It's development is supported from the research project TEMAP in Czech Republic and from collaborative efforts of the institutions who are using it.

Keywords: crowdsourcing, georeferencing, old maps, raster maps, search engine, web interfaces

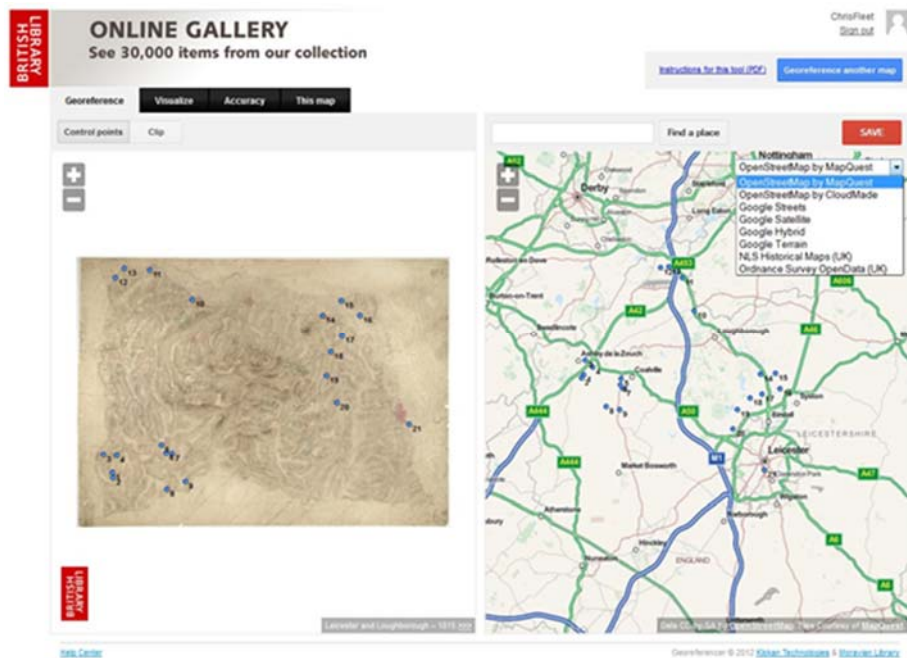


Figure 1. Georeferencer Interface: The British Library Georeferencer Pilot.

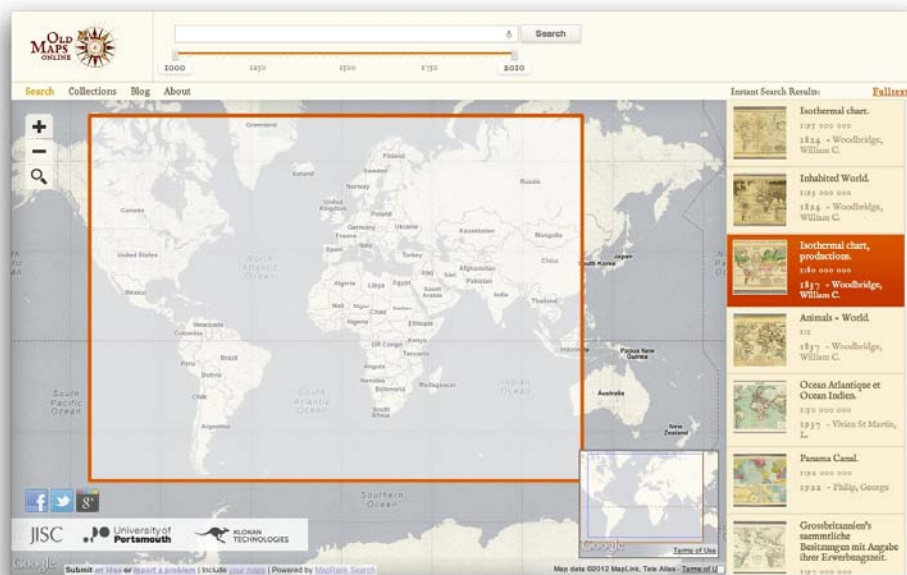


Figure 2. OldMapsOnline Interface: Search Engine User Interface.